## IN THE CLAIMS:

Claims 1-4    (Cancelled)

5.    (Previously Presented)  An image search system for determining a similarity of an image whose features are represented by either one of image features amounts, an amount of color distribution features or an amount of frequency distribution features, to search for a similar image,

wherein said amount of color distribution features is set to be an image feature amount obtained by dividing an image as an object representing feature into a predetermined plurality of blocks and determining a representative color of each said block to generate data of said representative color corresponding to each said block; and

wherein said amount of frequency distribution features is set to be an image feature amount generated by transforming an image as an object representing features into a reduced image of a fixed size and subjecting said reduced image to frequency conversion, the image search system comprising:

means for transforming, with respect to an image set to be a target whose kind of image feature amount is to be changed among respective images to be searched and an inquiry image, a kind of image feature amount of the target image in question to make kinds of image feature amounts of each said image to be searched and said inquiry image coincident with each other; and

means for comparing the image feature amount of said inquiry image with the image feature amount of each said image to be searched based on said transformed image feature amount and determining a similarity of each image to search for a similar image;

frequency distribution feature amount transformation means for transforming an amount of frequency distribution features into an amount of color distribution features indicative of features similar to image features represented by the amount of frequency distribution features in question, and

color distribution similarity calculation means for comparing the amount of color distribution features of said inquiry image with the amount of color distribution features of each said image to be searched and determining a similarity of each image to search for a similar image, wherein

said frequency distribution features amount transformation means renders all the kinds of image features amounts of each image to be searched and the inquiry image into the amount of color distribution features, and

said frequency distribution features amount transformation means including

inverse-frequency transformation means for decoding an applied amount of frequency distribution features to generate a decoded image, and

color distribution features amount extraction means for extracting each pixel value of said decoded image as an amount of color constituent features to extract an amount of color distribution features indicative of feature similar to image features represented by said applied amount of frequency distribution features.

6. (Previously Presented) The image search system as set forth in claim 5, further comprising

means for referring to data of the image feature amount of each said image to be searched,

means for receiving input of data of the image feature amount of said inquiry image.


7. (Previously Presented) The image search system as set forth in claim 5, wherein

said frequency distribution features amount transformation means including

image division means for dividing said decoded image into a predetermined plurality of blocks.


8. (Previously Presented) The image search system as set forth in claim 7, further comprising

means for referring to data of the image feature amount of each said image to be searched,

means for receiving input of data of the image feature amount of said inquiry image.

9.      (Previously Presented) The image search system as set forth in claim 7, wherein

said color distribution feature amount extraction means determines a representative color of each said block obtained by the division by said image division means to extract a set of said representative colors as an amount of color distribution features.

10.      (Previously Presented) The image search system as set forth in claim 9, wherein said color distribution features amount extraction means calculates a color mean of a pixel in each said block obtained by the division by said image division means to determine a color of said calculated color mean as said representative color.

Claims 11-12  (Cancelled)

13.      (Previously Presented)An image search system for determining a similarity of an image whose features are represented by either one of image features amounts, an amount of color distribution features or an amount of frequency distribution features, to search for a similar image,

wherein said amount of color distribution features is set to be an image feature amount obtained by dividing an image as an object representing feature into a predetermined plurality of blocks and determining a representative color of each said block to generate data of said representative color corresponding to each said block; and

wherein said amount of frequency distribution features is set to be an image

feature amount generated by transforming an image as an object representing features

into a reduced image of a fixed size and subjecting said reduced image to frequency

conversion, the image search system comprising:

means for transforming, with respect to an image set to be a target whose kind of

image feature amount is to be changed among respective images to be searched and an

inquiry image, a kind of image feature amount of the target image in question to make

kinds of image feature amounts of each said image to be searched and said inquiry image

coincident with each other;

means for comparing the image feature amount of said inquiry image with the

image feature amount of each said image to be searched based on said transformed image

feature amount and determining a similarity of each image to search for a similar image;

color distribution features amount transformation conversion means for

transforming an amount of color distribution features into an amount of frequency

distribution features indicative of features similar to image features represented by the

color distribution features in question, and

frequency distribution similarity calculation means for comparing the amount of

frequency distribution features of said inquiry image with the amount of frequency

distribution features of each said image to be searched and determining a similarity of

each image to search for a similar image, wherein

said color distribution features conversion means comprising

representative color determination means for determining a representative color of each bock in an applied color distribution features,

image generation means for generating an image which uses the representative color of each said block as a pixel,

image size change means for changing the size of the image generated by said image generation means to a predetermined size, and

frequency distribution features amount extraction means for frequency-converting the image changed by said image size change means to extract an amount of frequency distribution features indicative of feature similar to the image features represented by said applied amount of color distribution features.

14. (Previously Presented) The image search system as set forth in claim 5, wherein

each said image to be searched is set to be a target whose kind of said image features amount is to be transformed, and

the kind of image feature amount of each said image to be searched is transformed to be coincident with the kind of image features amount of said inquiry image.

15. (Previously Presented) The image search system as set forth in claim 5, wherein

said inquiry image is set to be a target whose kind of said image features amount is to be transformed, and

the kind of image feature amount of said inquiry image is transformed to be coincident with the kind of image features amount of each said image to be searched.

16. (Previously Presented) The image search system as set forth in claim 5, wherein

both the images, said inquiry image and said image to be searched, are set to be a target whose kind of said image feature amount is to be transformed, and

the kinds of image features of the respective images, said inquiry image and said each image to be searched, are transformed.

17. (Original) The image search system as set forth in claim 16, wherein a circuit for converting a kind of image features amount of said inquiry image and a circuit for converting a kind of image features amount of each said image to be searched are provided independently.

Claims 18-19 (Cancelled)

20. (Previously Presented) The image search system as set forth in claim 5, wherein

said frequency distribution features is set to be an image features amount generated by converting an image as an object representing feature into a reduced image of a fixed size and subjecting said reduced image to frequency transformation and quantization.

Claims 21-24 (Cancelled)

25. (Previously Presented) An image search method of determining a similarity of an image whose features are represented by either one of image features amounts, an amount of color distribution features or an amount of frequency distribution features, to search for a similar image, comprising the steps of:

with respect to an image set to be a target whose kind of image feature amount is to be converted among respective images to be searched and an inquiry image, transforming the kind of image feature amount of the target image in question to make kinds of image feature amounts of each said image to be searched and said inquiry image coincident with each other;

comparing the image feature amount of said inquiry image with the image feature amount of each said image to be searched based on said converted image feature amount and determining a similarity of each image to search for a similar image;

a frequency distribution features amount transformation step of transforming an amount of frequency distribution features into an amount of color distribution features indicative of feature similar to image features represented by the amount of frequency distribution features in question, and

a color distribution similarity calculation step of comparing the amount of color distribution features of said inquiry image with the amount of color distribution features of each said image to be searched and determining a similarity of each image to search for a similar image, wherein

said frequency distribution features amount transformation step renders all the kinds of image features amounts of each image to be searched and the inquiry image into the amount of color distribution features, and

said frequency distribution features amount transformation step including

an inverse-frequency transformation step of decoding an applied amount of frequency distribution features to generate a decoded image, and

a color distribution features amount extraction step of extracting each pixel value of said decoded image as an amount of color constituent features to extract an amount of color distribution features indicative of feature similar to image features represented by said applied amount of frequency distribution features.

26.    (Previously Presented) The image search method as set forth in claim 25, further comprising

a step of referring to data of the image feature amount of each said image to be searched,

a step of receiving input of data of the image feature amount of said inquiry image.

27.    (Previously Presented) The image search method as set forth in claim 25, wherein

said frequency distribution features amount transformation step including

an image division step of dividing said decoded image into a predetermined plurality of blocks.

28.    (Previously Presented) The image search method as set forth in claim 27, further comprising

a step of referring to data of the image feature amount of each said image to be searched,

a step of receiving input of data of the image feature amount of said inquiry image.

29.     (Previously Presented) The image search method as set forth in claim 27, wherein

said color distribution features amount extraction step determines

a representative color of each said block obtained by the division by said image division step to extract a set of said representative colors as an amount of color distribution features.

30.     (Previously Presented) The image search method as set forth in claim 29, wherein

said color distribution features amount extraction step calculates a color mean of a pixel in each said block obtained by the division by said image division step to determine a color of said calculated color mean as said representative color.

Claims 31-32  (Cancelled)

33.     (Previously Presented)  An image search method of determining a similarity of an image whose features are represented by either one of image features amounts, an amount of color distribution features or an amount of frequency distribution features, to search for a similar image, comprising the steps of:

with respect to an image set to be a target whose kind of image feature amount is to be converted among respective images to be searched and an inquiry image, transforming the kind of image feature amount of the target image in question to make

kinds of image feature amounts of each said image to be searched and said inquiry image coincident with each other;

comparing the image feature amount of said inquiry image with the image feature amount of each said image to be searched based on said converted image feature amount and determining a similarity of each image to search for a similar image;

a color distribution features amount transformation step of transforming an amount of a color distribution features into an amount of frequency distribution features indicative of feature similar to image features represented by the amount of color distribution features in question, and

a frequency distribution similarity calculation step of comparing the amount of the frequency distribution features of said inquiry image with the amount of the frequency distribution features of each said image to be searched and determining a similarity of each image to search for a similar image, wherein

said color distribution features amount transformation step renders all the kinds of image features amounts of each image to be searched and the inquiry image into the amount of frequency distribution features

said color distribution features amount transformation step comprising

a representative color determination step of determining a representative color of each bock in an applied color distribution features,

an image generation step of generating an image which uses the representative color of each said block as a pixel,

an image size change step of changing the size of the image generated by said image generation step to a predetermined size, and

a frequency distribution features extraction step of frequency-converting the image changed by said image size change step to extract an amount of frequency distribution features indicative of feature similar to the image features represented by said applied amount of color distribution features.

Claims 34-36  (Cancelled)

37.     (Currently Amended) An A computer-readable medium tangibly embodying an image search program for determining a similarity of an image whose features are represented by either one of image features amounts, an amount of color distribution features or an amount of frequency distribution features, to search for a similar image by controlling a computer, the program comprising the functions of:

with respect to an image set to be a target whose kind of image feature amount is to be converted among respective images to be searched and an inquiry image, transforming the kind of image feature amounts of the target image in question to make kinds of image feature amounts of each said image to be searched and said inquiry image coincident with each other; and

comparing the image feature amount of said inquiry image with the image feature amount of each said image to be searched based on said converted image feature amount and determining a similarity of each image to search for a similar image;

a frequency distribution features amount transformation function of transforming an amount of frequency distribution features into an amount of color distribution features indicative of feature similar to image features represented by the amount of frequency distribution features in question, and

a color distribution similarity calculation function of comparing the amount of color distribution features of said inquiry image with the amount of color distribution features of each said image to be searched and determining a similarity of each image to search for a similar image, wherein

said frequency distribution features amount transformation function renders all the kinds of image features amounts of each image to be searched and the inquiry image into the amount of color distribution features, and

said frequency distribution features amount transformation function including

an inverse-frequency transformation function of decoding an applied amount of frequency distribution features to generate a decoded image, and

a color distribution features amount extraction function of extracting each pixel value of said decoded image as an amount of color constituent features to extract an amount of color distribution features indicative of feature similar to image features represented by said applied amount of frequency distribution features.

Claims 38-41  (Cancelled)

42.     (Currently Amended) The <u>computer-readable medium</u> image search program as
set forth in claim 37, further comprising

        a function of referring to data of the image feature amount of each said image to
be searched,

        a function of receiving input of data of the image feature amount of said inquiry
image.

43.     (Currently Amended) An <u>A computer-readable medium tangibly embodying an</u>
image search program for determining a similarity of an image whose features are
represented by either one of image feature amounts, an amount of color distribution
features or an amount of frequency distribution features, to search for a similar image by
controlling a computer, <u>the program</u> comprising the functions of:

        with respect to an image set to be a target whose kind of image feature amount is
to be converted among respective images to be searched and an inquiry image,
transforming the kind of image feature amount of the target image in question to make
kinds of image feature amounts of each said image to be searched and said inquiry image
coincident with each other;

        comparing the image feature amount of said inquiry image with the image feature
amount of each said image to be searched based on said converted image feature amount
and determining a similarity of each image to search for a similar image;

a color distribution features amount transformation function of transforming an amount of a color distribution features into an amount of frequency distribution features indicative of feature similar to image features represented by the amount of color distribution features in question, and

a frequency distribution similarity calculation function of comparing the amount of frequency distribution features of said inquiry image with the amount of the frequency distribution features of each said image to be searched and determining a similarity of each image to search for a similar image, wherein

said color distribution features amount transformation function renders all the kinds of image features amounts of each image to be searched and the inquiry image into the amount of frequency distribution features,

said color distribution features amount transformation function comprising

a representative color determination function of determining a representative color of each bock in an applied color distribution features,

an image generation function of generating an image which uses the representative color of each said block as a pixel,

an image size change function of changing the size of the image generated by said image generation function to a predetermined size, and

a frequency distribution features extraction function of frequency-converting the image changed by said image size change function to extract an amount of frequency

distribution features indicative of feature similar to the image features represented by said

applied amount of color distribution features.